

The requirement is procedurally improper.

This application was filed on July 1, 1999. Office actions were issued on April 26, 2005 and January 26, 2009. A final office was issued on November 27, 2009. Furthermore, two restriction requirements were already issued on December 12, 2006 and April 19, 2007. Applicant contends that this restriction requirement is procedurally flawed.

Divisional practice is governed by 35 U.S.C. 121, which permits, but does not require the Director to require restriction in an application, if: "two or more independent and distinct inventions are claimed in one application." However, under 35 U.S.C. 121, no one can question the validity of a patent for failure of the Director to require the application to be restricted to one invention. Thus, divisional practice is provided for administrative convenience.

The patent office promulgated rules to implement divisional practice under 35 U.S.C. 121. One of those rules is 37 C.F.R. 1.142, reproduced below:

37 CFR 1.142. Requirement for restriction.

(a) If two or more independent and distinct inventions are claimed in a single application, the examiner in an Office action will require the applicant in the reply to that action to elect an invention to which the claims will be restricted, this official action being called a requirement for restriction (also known as a requirement for division). Such requirement will normally be made before any action on the merits; however, it may be made at any time before final action.

Under 37 C.F.R. 1.142, restriction can be made at any time BEFORE FINAL ACTION. Since the office submitted a final rejection on November 27, 2009, this restriction is procedurally improper and any attempt to maintain said requirement could be considered to be arbitrary and capricious.

Applicant previously paid fees for filing for a request for continued examination, on February 26, 2010, and thus, to the extent that restriction practice is provided to ensure that the Patent Office receives fees commensurate in scope with the work required to properly search an

invention, the interests of the office have been already been satisfied and there is no further need to require restriction.

The claims are not directed to independent and
distinct inventions.

In addition to being procedurally flawed, this restriction requirement fails to meet the substantive requirements for a restriction requirement. According to the M.P.E.P. § 802.01, one criteria for a proper requirement for restriction between patentably distinct inventions is that the inventions must be independent or distinct.¹

Claim 1 recites:

1. A computer-implemented method of constructing a portfolio of investment assets that are held for a customer in a customer account, the method comprising:
retrieving by one or more computer systems one or more target allocation ranges, each target allocation range including an upper limit value and a lower limit value for a type of investment asset to include in the portfolio;
receiving a list of investment assets available for inclusion in the portfolio;
selecting by one or more computer systems investment assets from the list of investment assets based on a measure of the risk-adjusted excess return of selected investment assets and the retrieved target allocation ranges;
adding the selected investment assets to the portfolio of investment assets;
determining by the one or more computer systems an asset allocation value for a first type of investment asset in the portfolio;
comparing by the one or more computer systems the asset allocation value for the first type of investment asset to an upper limit value and a lower limit value of the target allocation range for the first type of investment asset; and
determining based on the comparison that the asset allocation value for the first type of investment asset is outside the target allocation range for the first type of investment asset.

Claim 25 recites:

25. A computer-implemented method of constructing a portfolio, the method comprising:

¹ Applicant notes that 35 U.S.C. 121 states that the Commissioner may require restriction if two or more "independent and distinct" inventions are claimed in one application and in 37 CFR 1.141, the statement is made that two or more "independent and distinct inventions" may not be claimed in one application. Applicant does not concede that the position of the USPTO interpreting this language as permitting restriction if inventions are independent or distinct (see, e.g., MPEP 802.01) is correct. However, it is not necessary to address this issue in the present context.

receiving target allocations of percentages of different types of assets, the types of assets comprising domestic stock funds, foreign stock funds, bonds, and fixed income assets;
receiving a list of investments available for inclusion in the portfolio;
screening by one or more computers the list of investments;
causing one or more computers to select and weight investments from the screened list of investments based on a measure of the risk-adjusted excess return of selected investments and the received target allocations, the measure of risk-adjusted excess return comprising an alpha measurement determined in accordance with:

$$R_t = \alpha + \beta_1 R_{1t} + \beta_2 R_{2t} + \dots + \beta_N R_{Nt} + \varepsilon_t,$$

α = the risk adjusted excess return (alpha);
 R_t = the excess return of a fund in month t ;
 R_{kt} = the excess return of factor k in month t ($k = 1 \dots N$);
 β_k = the β of factor k ($k = 1 \dots N$);
 ε_t = the tracking error in month t ;

the weightings determined using

$$\begin{aligned} & \text{Minimize } \lambda W^T H W - G^T W \\ & \text{Subject } \sum_{i=1}^N W_i = 1 \\ & \text{Upper}_{stock} \geq \text{Stock}\% \geq \text{Lower}_{stock} \\ & \text{Upper}_{bonds} \geq \text{Bonds}\% \geq \text{Lower}_{bonds} \\ & \text{Upper}_{cash} \geq \text{Cash}\% \geq \text{Lower}_{cash} \\ & \text{Upper}_{foreign} \geq \text{Foreign}\% \geq \text{Lower}_{foreign} \end{aligned}$$

where

W = weight matrix of fund tracking _error wrt the investment benchmark

G = p - value of funds

λ = risk aversion ratio

and

p - value = t - distribution (student t , $n - p - 1$)

$$\text{student } t = \frac{\alpha}{\sigma(\varepsilon_t)/\sqrt{n - p}} = \text{information ratio} \times \sqrt{n - p}$$

$$\text{Information ratio} = \alpha / \sigma(\varepsilon_t)$$

where

α = average risk adjusted excess return during the period;

$\sigma(\varepsilon_t)$ = tracking - error wrt the custom benchmark;

n = number of observations;

p = number of the independent random variables;

$n - p - 1$ = degrees of freedom in t - test.

The examiner asserts that that these claims are distinct, but does not support this assertion in a manner that supports a proper restriction requirement. M.P.E.P. §802.01 specifies that:

Related inventions are distinct if the inventions as claimed are not connected in at least one of design, operation, or effect (e.g., can be made by, or used in, a materially different process) and wherein at least one invention is PATENTABLE (novel and nonobvious) OVER THE OTHER (though they may each be unpatentable over the prior art).

The examiner has failed to address how, for example, the method of claim 1 which requires “retrieving by one or more computer systems one or more target allocation ranges, each target allocation range including an upper limit value and a lower limit value for a type of investment asset to include in the portfolio; receiving a list of investment assets available for inclusion in the portfolio; selecting by one or more computer systems] investment assets from the list of investment assets based on a measure of the risk-adjusted excess return of selected investment assets and the retrieved target allocation ranges; adding the selected investment assets to the portfolio of investment assets; determining by the one or more computer systems an asset allocation value for a first type of investment asset in the portfolio; comparing by the one or more computer systems the asset allocation value for the first type of investment asset to an upper limit value and a lower limit value of the target allocation range for the first type of investment asset; and determining based on the comparison that the asset allocation value for the first type of investment asset is outside the target allocation range for the first type of investment asset,” would be novel and unobvious over the method of claim 25, which generally includes the features of claims 1, 7 and 9 . Rather, the examiner simply states:

The inventions are distinct, each from the other because of the following reasons: Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product

is useful to make other than the final product, and the species are patentably distinct (MPEP § 806.05G)). In the instant case, the intermediate product is deemed to be useful as a for determining the alpha risk adjusted return of one or more assets and the inventions are deemed patentably distinct because there is nothing of record to show them to be obvious variants.

The examiner's argument does not address the test of whether the claims are ARE PATENTABLE (novel and unobvious) OVER EACH OTHER. Accordingly, the examiner's restriction is improper and should be removed.

Further the examiner argues that restriction is proper because:

[T]here would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.c. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant contends that the examiner has not shown that any of these reasons exist in the present application.

The examiner states: "(a) the inventions have acquired a separate status in the art in view of their different classification." Applicant notes that all of the claims are classified in class 705, subclass 35. Therefore, there is no difference in classification.

The examiner also states: "(b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter." The examiner has not shown how the claimed methods and computer program product are directed to divergent subject matter. As illustrated above, each of the claims rely on at least the same set of features expressed as method and product, which even under the Office's own rules Applicant is entitled to maintain in one application. Furthermore, claim 25 includes features of claims 1, 7 and 9. Accordingly, claim 25 does not have "divergent subject matter" from claims 1, 7 and 9, for example.

The examiner also states: “(e) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries).” Again, the examiner makes an unsupported allegation. Nothing in the record suggests that the field of search would be different for any of the claim sets.

The examiner also states: “(d) the prior art applicable to one invention would not likely be applicable to another invention.” Nothing in the record suggests that the prior art would be any different for any of the claim sets. Again, this is a mere unsubstantiated allegation by the examiner.

The examiner also states: “(e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.” Applicant contends that at least because all of the claims recite structure, the claims as presented could **not** be the subject of a valid 35 U.S.C. 101 rejection, and because they all recite analogous features they could not be the subject of any valid, different, 112, first paragraph rejections.

Applicant will neither cancel nor indicate claims as being withdrawn until the examiner can adequately explain to Applicant the legality of this restriction requirement by explaining how the examiner can evade 37 CFR 1.142. In addition, Applicant requests that the examiner furnish cogent reasons why the claims are directed to independent and distinct inventions and how there would be a serious burden on the examiner if restriction is not required rather than merely supplying boilerplate from the MPEP.

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No fees are believed due at this time. Please apply any charges or credits to Deposit
Account No. 06-1050, referencing Attorney Docket No. 08575-0046001.

Respectfully submitted,

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